

74. (New) The method of claim 69, wherein the patient is a human.
75. (New) A method of treating a patient to reduce hyperoxic lung injury, comprising:  
identifying a patient suffering from or at risk for hyperoxic lung injury; and  
administering to the patient a composition comprising carbon monoxide in an amount  
effective to reduce hyperoxic lung injury.
76. (New) The method of claim 75, wherein the composition comprises carbon  
monoxide at a concentration of at least 50 ppm.
77. (New) The method of claim 75, wherein the composition comprises carbon  
monoxide at a concentration of at least 100 ppm.
78. (New) The method of claim 75, wherein the composition comprises carbon  
monoxide at a concentration of at least 250 ppm.
79. (New) The method of claim 75, wherein the composition comprises carbon  
monoxide at a concentration of about 50 ppm to about 500 ppm.
80. (New) The method of claim 75, wherein the patient is a human.
81. (New) A gaseous mixture comprising (a) at least 98% oxygen gas and (b) an amount  
of carbon monoxide gas effective to reduce in a patient hyperoxic lung injury caused by inhaling  
a gaseous composition at least 98% of which is oxygen.
82. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide  
gas at a concentration of at least 50 ppm.

83. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of at least 100 ppm.

84. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of at least 250 ppm.

85. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of about 50 ppm to about 500 ppm.

86. (New) A method of treating a patient in need of a high concentration of oxygen, comprising:

identifying a patient in need of a high concentration of oxygen; and  
administering to the patient the gaseous mixture of claim 81.

87. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 50 ppm.

88. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 100 ppm.

89. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 250 ppm.

90. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of about 50 ppm to about 500 ppm.

## APPENDIX

42. (Reiterated) A method of treating a disorder secondary to or resulting in oxidative stress to a patient, comprising:

identifying a patient suffering from a disorder secondary to or resulting in oxidative stress; and

administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the disorder is selected from the group consisting of: emphysema, bronchitis, adult respiratory distress syndrome, cystic fibrosis, pneumonia, interstitial lung disease, primary pulmonary hypertension, secondary pulmonary hypertension, Parkinson's disease and Alzheimer's disease.

43. (Reiterated) The method of claim 42, wherein the disorder is emphysema.

44. (Reiterated) The method of claim 42, wherein the disorder is bronchitis.

45. (Reiterated) The method of claim 42, wherein the disorder is cystic fibrosis.

46. (Reiterated) The method of claim 42, wherein the disorder is pneumonia.

47. (Reiterated) The method of claim 42, wherein the disorder is interstitial lung disease.

48. (Reiterated) The method of claim 42, wherein the disorder is Parkinson's disease.

49. (Reiterated) The method of claim 42, wherein the disorder is Alzheimer's disease.

50. (Reiterated) The method of claim 42, wherein the disorder is adult respiratory distress syndrome.

51. (Reiterated) The method of claim 42, wherein the disorder is primary pulmonary hypertension.

52. (Reiterated) The method of claim 42, wherein the disorder is secondary pulmonary hypertension.

53. (Reiterated) The method of claim 42, wherein the composition is administered as an inhaled gas.

54. (Reiterated) The method of claim 53, wherein the gas is administered as a mixture comprising carbon monoxide, nitrogen and oxygen.

55. (Reiterated) The method of claim 54, wherein the concentration of carbon monoxide in the mixture is monitored with a carbon monoxide analyzer.

56. (Reiterated) The method of claim 42, wherein the patient is a human.

57. (Reiterated) A method of treating asthma in a human patient, comprising:  
identifying a patient suffering from asthma; and  
administering to the patient an effective amount of a composition comprising carbon monoxide.

58. (Reiterated) A method of treating asthma in a patient, comprising:  
identifying a patient suffering from asthma; and  
administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the composition comprises about 0.0001% to about 0.25% carbon monoxide.

59. (Reiterated) The method of claim 58, wherein the patient is a human.

60. (Reiterated) A method of treating cancer in a patient, comprising:

identifying a patient suffering from cancer; and  
administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the cancer is selected from a group consisting of: cancer of the stomach, colon, rectum, liver, pancreas, lung, kidney, cervix uteri, corpus uteri, ovary, prostate, testis, bladder, skin, brain/central nervous system, head, neck, mouth, esophagus, larynx and pharynx; Hodgkins disease; non-Hodgkins leukemia; sarcoma; choriocarcinoma; and lymphoma.

61. (Reiterated) A method of treating cancer in a human patient, comprising:  
identifying a patient suffering from cancer; and  
administering to the patient an effective amount of a composition comprising carbon monoxide, to thereby treat cancer in the patient.

62. (Reiterated) A method of treating inflammation in a patient, comprising:  
identifying a patient suffering from inflammation of at least one organ selected from a group consisting of: kidney, brain, heart, liver, spleen, skin and lung; and  
administering to the patient an effective amount of a composition comprising carbon monoxide, wherein the inflammation is of a type selected from a group consisting of: acute, allergic, alterative, atrophic, catarrhal, croupous, fibrinopurulent, fibrinous, immune, hyperplastic, proliferative, subacute, serous and serofibrinous inflammation.

63. (Reiterated) A method of treating inflammation in a human patient, comprising:  
identifying a human patient suffering from inflammation of at least one organ selected from a group consisting of: kidney, brain, heart, liver, spleen, skin and lung; and  
administering to the patient an effective amount of a composition comprising carbon monoxide, to thereby treat inflammation in the patient.

64. (Reiterated) A method of treating inflammation in a patient, comprising:  
identifying a patient suffering from or at risk of inflammation of at least one organ selected from the group consisting of: kidney, spleen and skin; and

administering to the patient an effective amount of a composition comprising carbon monoxide, to thereby treat inflammation in the patient.

65. (Reiterated) A method of treating inflammation in a patient, comprising:  
identifying a patient suffering from or at risk of sepsis; and  
administering to the patient a composition comprising carbon monoxide in an amount effective to reduce or prevent inflammation secondary to sepsis.

66. (Reiterated) A method for promoting wound healing in a patient, comprising:  
identifying a patient suffering from a wound; and  
administering to the patient an amount of carbon monoxide sufficient to promote wound healing in the patient.

67. (Reiterated) A method of treating sepsis in a patient, comprising:  
identifying a patient suffering from or at risk of sepsis; and  
administering to the patient a composition comprising carbon monoxide in an amount effective to treat sepsis in the patient.

68. (Reiterated) A method of treating arthritis in a patient, comprising:  
identifying a patient suffering from or at risk for arthritis; and  
administering to the patient a composition comprising carbon monoxide in an amount effective to treat arthritis in the patient.

69. (Reiterated) A method of treating a patient to reduce oxidative stress associated with hyperoxia, comprising:  
identifying a patient suffering from or at risk for oxidative stress associated with hyperoxia; and  
administering to the patient a composition comprising carbon monoxide in an amount effective to reduce oxidative stress associated with hyperoxia.

70. (New) The method of claim 69, wherein the composition comprises carbon monoxide at a concentration of at least 50 ppm.

71. (New) The method of claim 69, wherein the composition comprises carbon monoxide at a concentration of at least 100 ppm.

72. (New) The method of claim 69, wherein the composition comprises carbon monoxide at a concentration of at least 250 ppm.

73. (New) The method of claim 69, wherein the composition comprises carbon monoxide at a concentration of about 50 ppm to about 500 ppm.

74. (New) The method of claim 69, wherein the patient is a human.

75. (New) A method of treating a patient to reduce hyperoxic lung injury, comprising:  
identifying a patient suffering from or at risk for hyperoxic lung injury; and  
administering to the patient a composition comprising carbon monoxide in an amount effective to reduce hyperoxic lung injury.

76. (New) The method of claim 75, wherein the composition is a gas comprising carbon monoxide at a concentration of at least 50 ppm.

77. (New) The method of claim 75, wherein the composition is a gas comprising carbon monoxide at a concentration of at least 100 ppm.

78. (New) The method of claim 75, wherein the composition is a gas comprising carbon monoxide at a concentration of at least 250 ppm.

79. (New) The method of claim 75, wherein the composition is a gas comprising carbon monoxide at a concentration of about 50 ppm to about 500 ppm.

80. (New) The method of claim 75, wherein the patient is a human.

81. (New) A gaseous mixture comprising (a) at least 98% oxygen gas and (b) an amount of carbon monoxide gas effective to reduce in a patient hyperoxic lung injury caused by inhaling a gaseous composition at least 98% of which is oxygen.

82. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of at least 50 ppm.

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84. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of at least 250 ppm.

85. (New) The mixture of claim 81, wherein the mixture comprises carbon monoxide gas at a concentration of about 50 ppm to about 500 ppm.

86. (New) A method of treating a patient in need of a high concentration of oxygen, comprising:

identifying a patient in need of a high concentration of oxygen; and  
administering to the patient the gaseous mixture of claim 81.

87. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 50 ppm.

88. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 100 ppm.



Applicant : Augustine M. K. C. et al.  
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89. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of at least 250 ppm.

90. (New) The method of claim 86, wherein the mixture comprises carbon monoxide gas at a concentration of about 50 ppm to about 500 ppm.